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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,006	07/29/2003	Paul Adams	BIC-016	7341
29626 7590 06/02/2008 THE H.T. THAN LAW GROUP WATERFRONT CENTER SUITE 560 1010 WISCONSIN AVENUE NW WASHINGTON, DC 20007				
EXAMINER				
LEE, KEVIN L				
ART UNIT		PAPER NUMBER		
3753				
MAIL DATE		DELIVERY MODE		
06/02/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/629,006

Applicant(s)

ADAMS ET AL.

Examiner

KEVIN L. LEE

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7, 12-16, 22, 23, 25, 27-30, 34, 45-47 and 99-114 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 12-16, 22, 23, 25, 27-30, 34, 45-47 and 99-114 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's response filed March 14, 2008 has been reviewed and considered by the examiner. Applicant's arguments, with respect to the prior art rejections under 35 U.S.C. 103(a) as being unpatentable over Franklin (U.S. Patent No. 6,824,011) in view of Powell (U.S. Patent No. 6,135,150) and Kojak, III (U.S. Patent No. 4,672,998) and all of the prior art rejections over Prasad et al (U.S. Patent No. 6,924,054) in view of Powell et al and Kojak, III have been fully considered and are persuasive. These prior art rejections have been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 12-16, 22, 23, 25, 27-30, 34, 45-47 and 99-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin in view of Murphy et al (U.S. Patent No. 2,504,569). The patent to Franklin discloses a fuel system including valves (52, 54) in a fuel cell (10) and valves (44) in the fuel supply (40, 42). The valves are disclosed to engage each other when the fuel supply is coupled to the fuel cell and are self-sealing, col. 2, lines 9-20. The patent to Murphy et al teaches a valve formed of a first and second valve component (11, 12) each comprising a biased slidable inner body (42) cooperating with a sealing member (41) to form an internal seal. The valve

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components cooperate with each other to open the internal seal in each valve component. A seal (38) provides an inter-component seal between the two valve components before the internal seals open, see Figure 2. In view of the teaching of Murphy et al, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the self-sealing valves for the valves of Franklin as an alternate means of controlling the fluid flow from the fuel supply to the fuel cell. It is noted that the spring constants of Franklin are substantially the same. It would have been an obvious design expedient to one of ordinary skill in the art at the time of the invention to modify the spring constants so that they are dissimilar so that one of the valves opens before the other.

Claim 114 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin in view of Murphy et al as applied to claim 101 above, and further in view of Kojak, III. The fuel supply of Franklin lacks having a covering member. The patent to Kojak, III teaches providing a removable covering member (122) for a male coupler, col. 4, lines 26-28. In view of the teaching of Kojak, III, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Franklin to include a removable covering to protect the fuel supply coupler from contamination when the fuel supply is not in use.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN L. LEE whose telephone number is (571) 272-4915. The examiner can normally be reached on MONDAY-THURSDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GREGORY HUSON can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KEVIN L LEE/
Primary Examiner, Art Unit 3753